

DRVOTERM DTO3 A2

Product description:



Three-layer lightweight board with a core of the segments of stone wool, coated with two non-combustible layers of mineralized wood wool fibers with fine structure related cement binder and additives. Cement binder and additives unite wood wool and the core into a compact unit. The surface provides high mechanical resistance and exceptional grip of the boards for mortar and adhesives.



Characteristics:

- Non-combustible material: A2 - s1, d0 after EN 13501-1
- Thermal conductivity for stone wool: $\lambda=0,038$ W
- Audible insulation properties
- Fire resistance up to F90 AB (plastered boards)
- Good adhesion to concrete and the ideal surface for plastering
- Neutrality in combination with building materials and metals
- Very good mechanical properties
- Easy formatting and other processing at installation

Purpose, use and installation:

- Cladding of ceilings and walls in underground garages for anti-fire, thermal and acoustic insulation for residential, commercial and other buildings
- Installation in applications where flame resistance, thermal and sound insulation, sound absorption, and at the same time a beautiful and natural look are required
- Installation with bonding with concrete or subsequent fastening



WW-C/3 [7,5/x/7,5] MW-HRN EN 13168-L2-W1-T1-S2-P1-CS(10)50-BS*-TR15-CI3

Thickness	(mm)	50	75	100	125	150	175	200
BS*	(kPa)	500	400	300	200	150	100	75

DRVOTERM (Table 1)	DTO3 A2 50	DTO3 A2 75	DTO3 A2 100	DTO3 A2 125	DTO3 A2 150	DTO3 A2 175	DTO3 A2 200
Board format (mm)	1000 x 600						
Board thickness (mm)	50	75	100	125	150	175	200
Layer thickness (mm)	7,5-35-7,5	7,5-60-7,5	7,5-85-7,5	7,5-110-7,5	7,5-135-7,5	7,5-160-7,5	7,5-185-7,5
Average specific mass (kg/ m ²)	12,00	15,00	19,00	23,00	28,00	33,00	38,00
Thermal resistance R _D (m ² K/ W)	1,05	1,70	2,35	3,00	3,70	4,35	5,00
Pallet quantity (pcs/m ²)	80/48	56/33,6	40/24	32/19,2	28/16,8	24/14,4	20/12

Essential Characteristics	Designation	Units	Data							Standard
Board thickness	d	[mm]	50	75	100	125	150	175	200	EN 13168
Board length	l	[mm]	1000							EN 13168
Board width	b	[mm]	600							EN 13168
Layer thickness		[mm]	See the Table 1.							EN 13168
Tolerance: - Length	L2	[mm]	+3, -5							EN 822
- Width	W1	[mm]	± 3							EN 822
- Thickness	T1	[mm]	3; -2 for nominal length $l \leq 1.250$ mm 4; -3 for nominal length $l > 1.250$ mm							EN 822
- Squareness	S2	[mm]	≤ 2							EN 824
- Flatness	P1	[mm]	≤ 6							EN 825
Declared thermal conductivity	λ_D	W/mK	Wood wool (WW): 0,100 Stone wool (MW): 0,038							EN 12667 i EN 12939
Thermal resistance	R_D	m ² K/W	1,05	1,70	2,35	3,00	3,70	4,35	5,00	EN 12667 EN 12939
Bending strength	BS	kPa	500	400	300	200	150	100	75	EN 12089, A
Compressive strength at 10% deformat.	CS(10)	kPa	≥ 50							EN 826
Tensile strength	TR	kPa	≥ 15							EN 1607
Diffusion resistance coefficient	μ		3 - 5							
Sound absorption coef	α_w		0,85 (Class B)							EN ISO 11654:1997
Chloride content	Cl	%	≤ 0,06							EN 13168
Reaction to fire	Class		A2-s1, d0							EN 13501-1

Preparation

Before installation, the boards must be dry. We recommend cutting the boards to using an electric circular saw or manual saw. The base should be level and free from dust or discrete particles.

Lining external and internal Walls and existing ceiling construction.

The boards are glued to the base by construction adhesive (e.g. STIROLIM, to be applied in strips at the edge of the board and dots in the middle of the board) and, in addition, mechanically fixed (polyamide anchors with galvanized steel bolts; 6 to 8 pcs/m² are needed). Vertical joints should be staggered, and in the corners the boards should alternatively extend over the edge. The joints between boards should not match the circumference of openings in the wall. The adhesive ensures good adhesion to the wall and at the same time enables the external surface to be made even. The surface is then treated in accordance with the relevant instructions for execution, depending on the system (thermal-insulating facade, insulation of walls on the inside, etc.).

Insulation of Ceilings in Underpasses and Unheated Premises

An efficient and cost-effective installation method is fixing of KOMBI boards by concrete in the manner of lost formwork. Concreting anchors (SPK KOMBI) of appropriate length are inserted in the board, and then the boards are laid on the formwork tightly fitting each other. Reinforcing mesh is then laid on the boards; it is recommended to use spacers. The following step is concrete pouring. The formwork is simple to remove since it is in no contact with concrete, while the boards are joined by concrete across their entire surface. The anchors increase the tensile strength of the boards. Further treatment of the boards (rendering, painting, etc.) is possible, but even untreated boards are durable and of pleasant appearance.

Storage

The boards are packed on wooden pallets; the quantities are specified in the table. They are stored in covered premises, protected against humidity and direct sunlight. Without their original packaging the boards are stored in horizontal position on a flat surface, and carried around in vertical position (usually by the edge of the longer side).



The product is in compliance with the requirements: HRN EN 13168:2012+A1:2015

- Certificate of constancy of performance No.: 2477-CPR-2400, Amendments No.1,- INSTITUT IGH d.d. Zagreb, Croatia,
- Initial testing report (ITT), L1-04-033, FIW München, Germany,
- Testing report, Prüfinstitut Hoch, Fladungen, Germany,
- Testing report No: 12.500.001.355, TU Graz, Austria,
- Declaration of Performance No.: CPR-DoP-TI 006 - Rev 2 in accordance with REGULATION (EU) No.: 305/2011

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